

Synra Dome

ORIHALCON Technologies

Toshiyuki Takahei

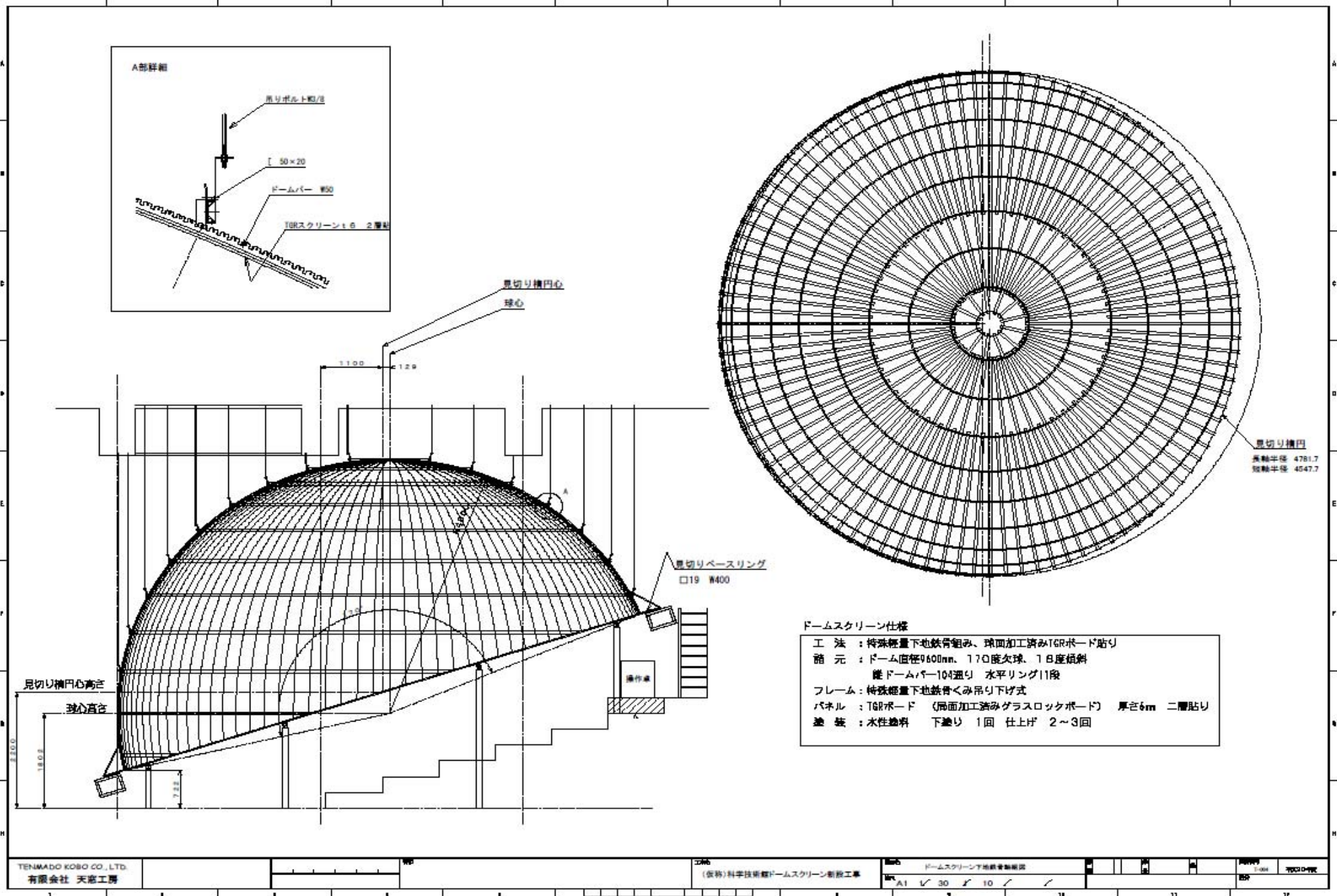


- 20th Aug, 2008, The First Public Stereoscopic Dome in Japan 'Synra Dome' was opened in Science Museum, Kitanomaru, Tokyo.
- 'Synra' comes from 'Shinra Bansyou' which means 'Everything in Universe' in Japanese.

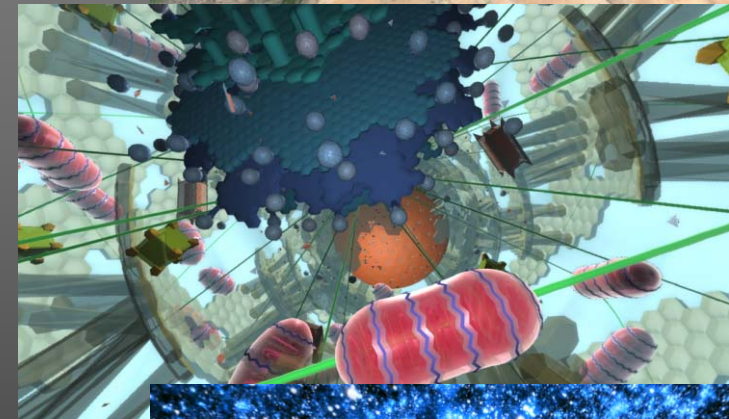
Dome Specification

- 10m in diameter, 18 degrees tilted, 62 seats.
- Projector: BARCO SIM5R(SXGA+) x 12
- PCs: 12PCs for Projection, 1PC for control.
- Stereoscopic method: INFITEC
- Screen: Complete seamless screen
- With Special purpose super computer MD-GRAPES.

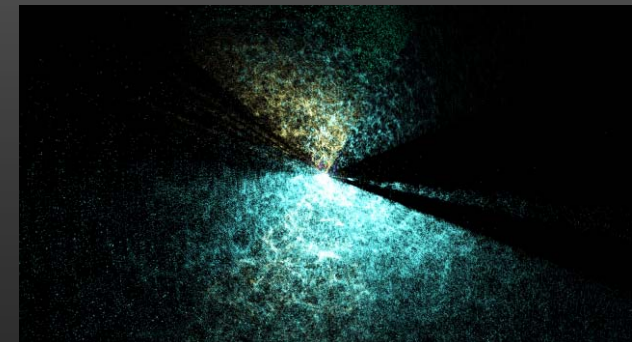
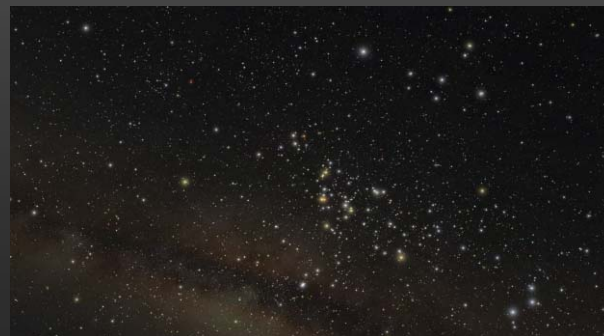
Top and Side View



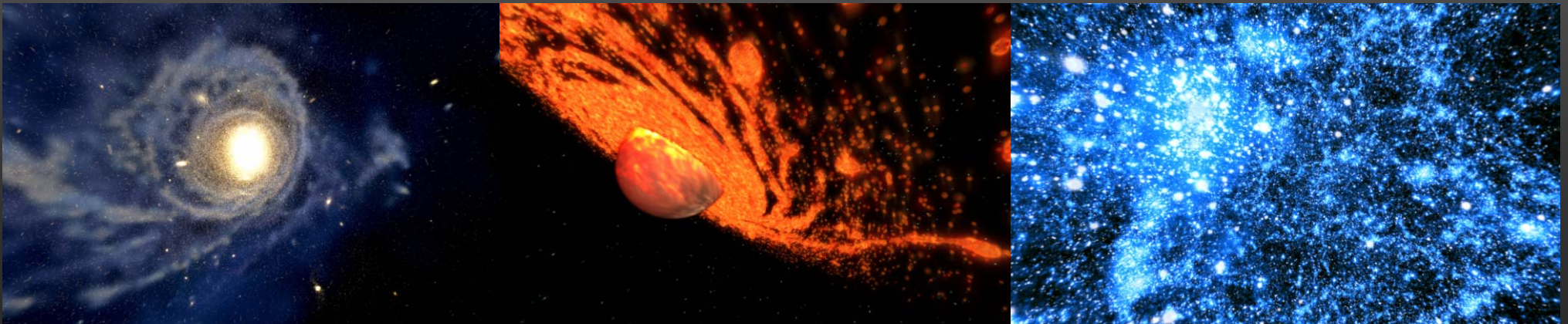
- Sunday and weekday
Full dome / Stereoscopic full dome movies
 - Cosmic Discoveries
 - 4D2U Project Movies
 - Milky Way Galaxy
 - Formation of Earth and Moon
 - Cosmic View
 - The Central Dogma
- Saturday



- Original Stereoscopic Full-dome movie rendered by SCISS Uniview
- Presented by Orihalcon Technologies, Inc.



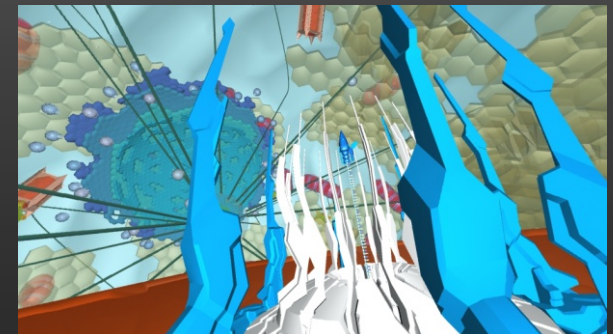
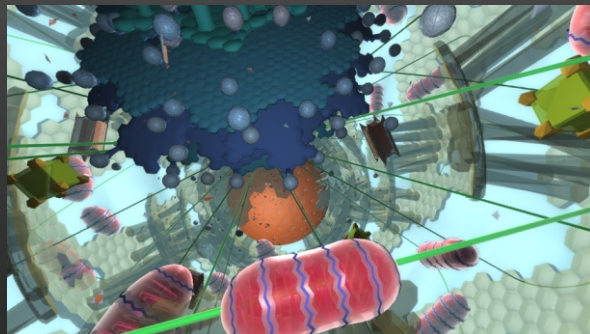
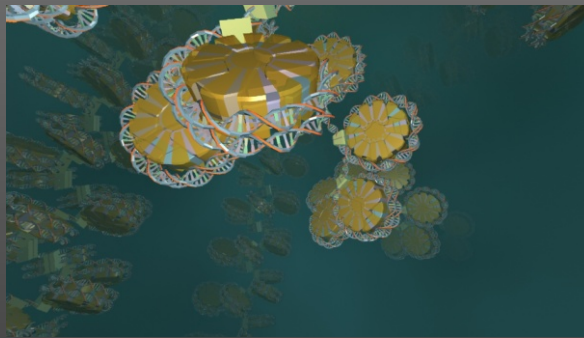
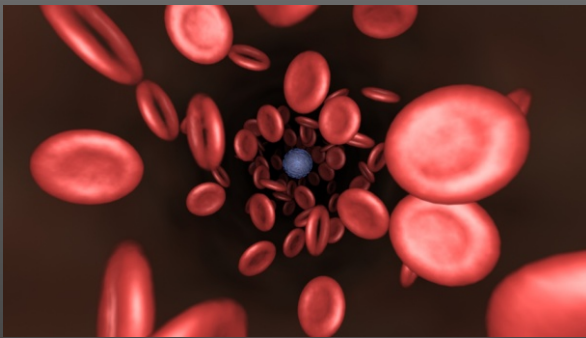
- Visualize time and space simulated by super computers.
- Presented by NAOJ 4D2U Project.
- Contents:
 - Milky Way Galaxy
 - Formation of Earth and Moon
 - Cosmic View



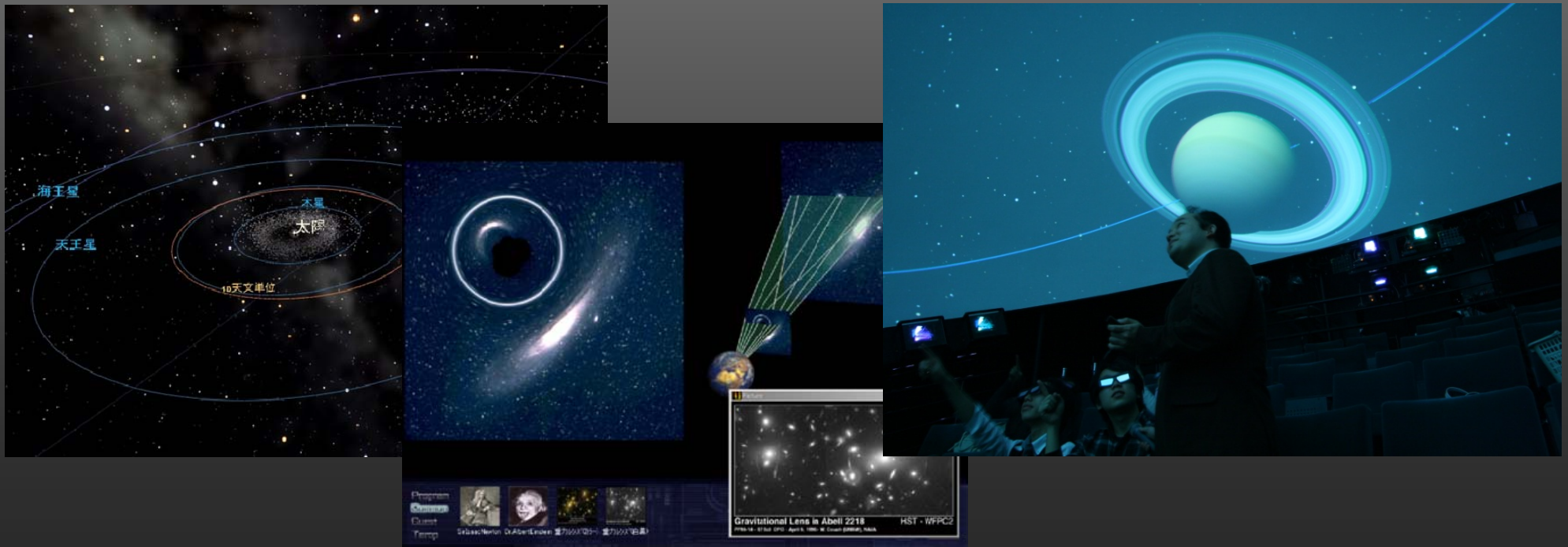
The Central Dogma

Synra

- Visualize complicated process from genomic information to protein synthesis.
- Stylish 'Japanese robot animation' visual.
- Presented by RIKEN Omics Science Center



- Scientists talk about the latest scientific topics by themselves with immersive interactive tools.
- Interactive and Real-time is key of the live show.
- From Astronomy to life science, everything!



- Since 1996. Now reborn in Synra Dome.
 - Astronomical topics
 - Galaxy Collision Simulation
 - Remote Observation with Yerkes Obs.
 - Guest Corner

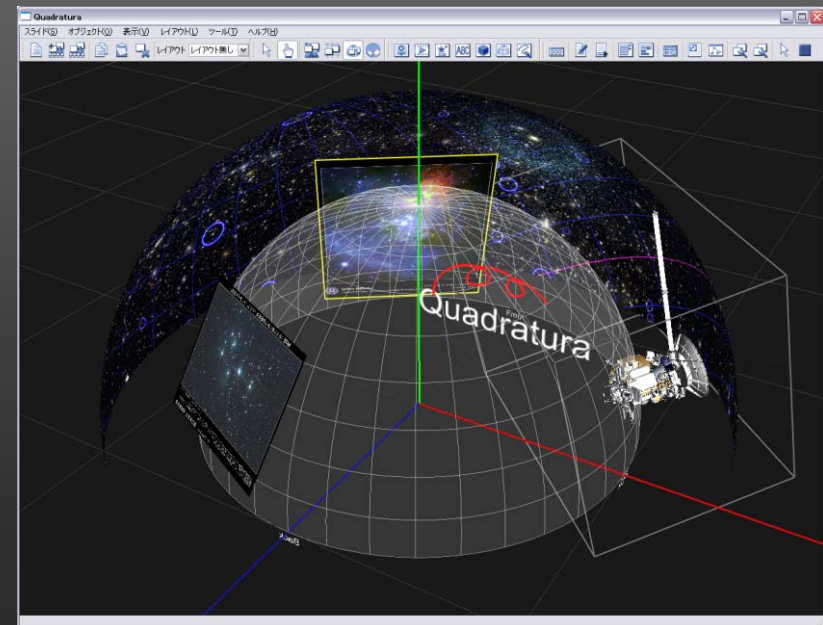
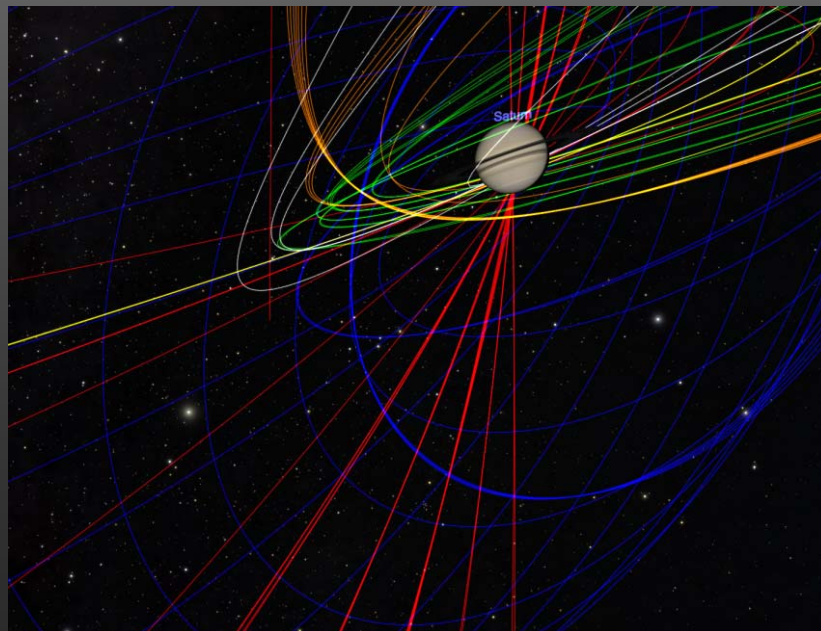
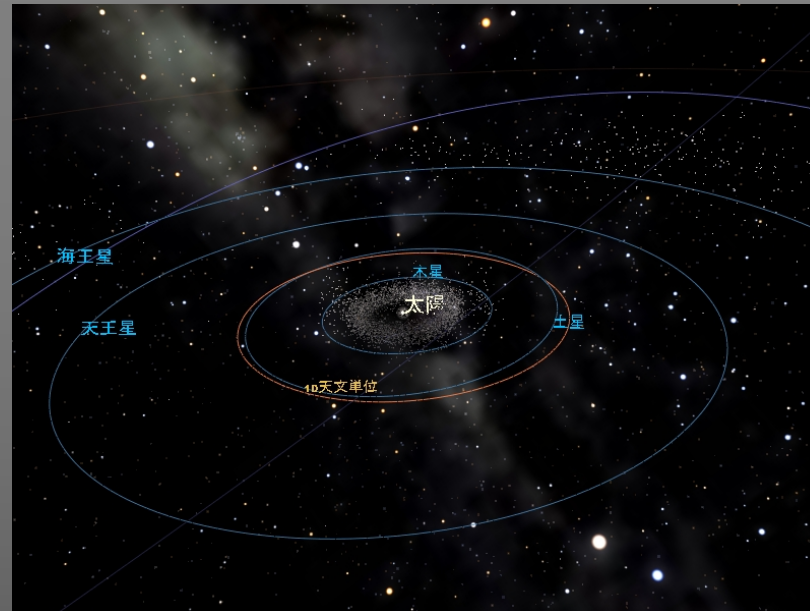
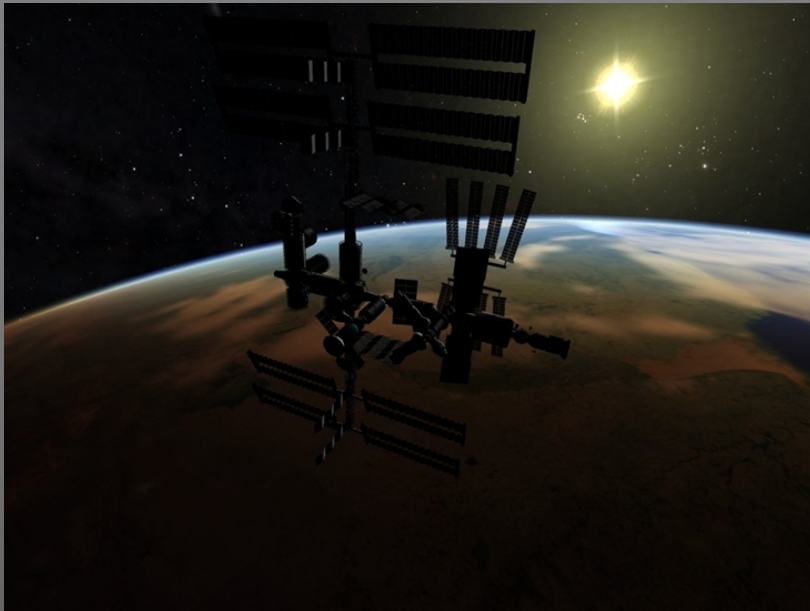


- The most beautiful space visuals. The world first stereoscopic Uniview installed.
- Mitaka Pro, advanced version of Mitaka is used in UNIVERSE Live Show.
- Brand-new immersive presentation tool Quadratura as dome visualization framework.
- AllSkyViewer and other tools for the best dome content creation workflow.



Software in Synra Dome

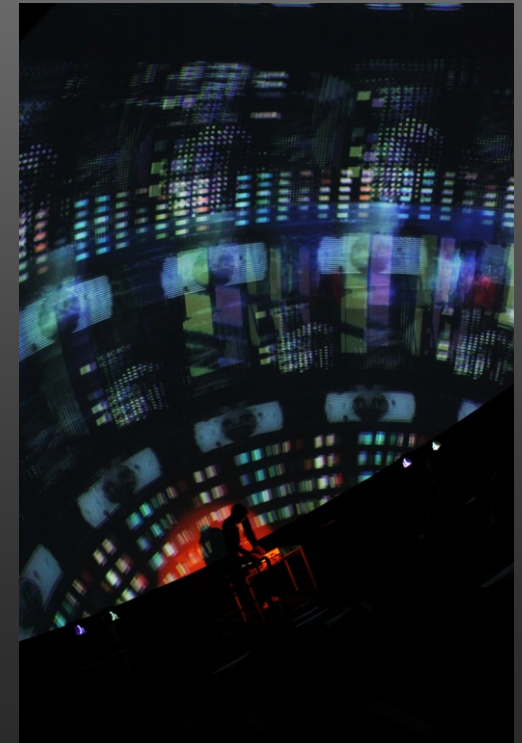
Synra



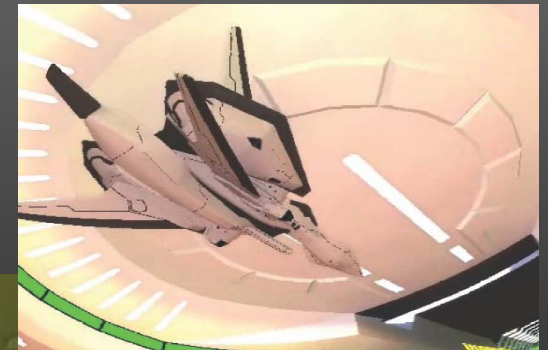
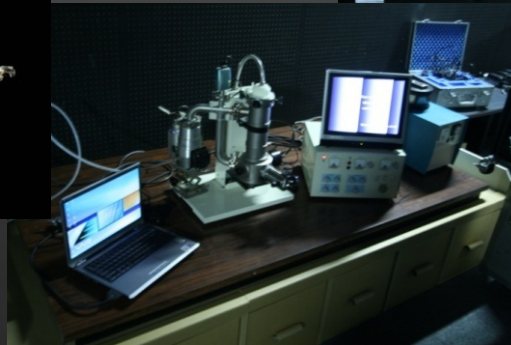
Various Events in Synra Dome

Synra

- Technical Demo. Workshop
- Stereoscopic Visual Jockey Concert
- BELLA GAIA private preview
- Digital Planetarium Workshop, etc.



- All sky video recording and various special devices to visualize invisible things.
- Stereoscopic movies from deep sea.
- All sky walk through in proton accelerator.
- Real-time games in dome!
- and more!



We built the Japanese first public stereoscopic dome theater 'Synra Dome' in Science Museum.

New place of collaboration between scientists, museum and creators for visualization in the cutting-edge immersive environment.

Many new things happened here, and we keep more new things happening here, in Synra Dome.